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EXPERIMENTAL AND CLINICAL RESEARCHES APPLIED TO
PHYSIOLOGY AND PATHOLOGY.

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[Communicated for the Boston Medical and Surgical Journal.]

FROM August, 1852, to August, 1853, I published in the *Medical Examiner*, of Philadelphia, a series of thirty-three short papers, which were afterwards connected in one volume, under the title: "*Experimental Researches applied to Physiology and Pathology.*" The following article is the first of a second series of papers, which, with the preceding series which has appeared in Philadelphia, will form a complete summary of all my original researches in various branches of the medical sciences.

I. ARTIFICIAL PRODUCTION OF AN EPILEPTIFORM AFFECTION IN
ANIMALS, AND ETIOLOGY AND TREATMENT OF CERTAIN FORMS OF EPI-
LEPSY IN MAN.

Six years ago, I discovered that certain alterations of the spinal cord, upon mammals, produce, after a few weeks, a convulsive affection, resembling epilepsy. (See *Comptes Rendus de la Soc. de Biol.*, t. ii., pp. 105 and 169—1850.) Since that time, I have found many new facts concerning this affection; and lately, in comparing the results of my experiments with what has been observed in man, in many cases of epilepsy, I have been led to some conclusions, which are I think, very important, as regards the etiology, the nature and the treatment of epilepsy. Although some of the results of my experiments have already been published (see my *Exper. Researches applied to Physiology and Pathology*, pp. 36 and 80, the *Archives de Médéc.*, etc., Fevrier, 1856; and the *Moniteur des Hopitaux*, Oct., 1856, p. 954), I will relate them here, as I shall have to make use of them when I expose my views upon the pathology and treatment of epilepsy. I will also give a detailed account of some of the facts I have observed in animals, because these facts throw a great deal of light upon the phenomena of epilepsy in man.

§ I. I have found that the following kinds of injury to the spinal cord are able to produce epilepsy, or at least a disease resembling epilepsy, in animals belonging to different species, but mostly upon guinea-pigs.

1st. A complete transversal section of a lateral half of this organ.

2d. A transversal section of its two posterior columns, of its posterior cornua of gray matter, and of a part of the lateral columns.

3d. A transversal section of either the posterior columns or the lateral, or the anterior alone.

4th. A complete transversal section of the whole organ.

5th. A simple puncture.

Of all these injuries, the first, the second and the fourth seem to have more power to produce epilepsy than the others. The first particularly, *i. e.*, the section of a lateral half of the spinal cord, seems to produce constantly this disease in animals that live longer than three or four weeks after the operation. After a section of either the lateral, the anterior or the posterior columns alone, epilepsy rarely appears, and it seems that in the cases where it has been produced, there has been a deeper incision than usual, and that part of the gray matter has been attained. In other experiments, few in number, the section of the central gray matter (the white being hardly injured) has been followed by this convulsive disease. I have seen it but very rarely after a simple puncture of the cord.

It is particularly after injuries to the part of the spinal cord which extends from the seventh or eighth dorsal vertebra to the third lumbar, that epilepsy appears.

§ II. Usually this affection begins during the third or fourth week after the injury. In some cases I have seen it beginning during the second week, and even one or two days before. At first the fit consists only in a spasm of the muscles of the face and neck, either on one or the two sides, according to the transversal extent of the injury. One eye or both are forcibly shut, the head is drawn towards one of the shoulders, and the mouth opened by the spasm of some of the muscles of the neck. This spasmodic attack quickly disappears.

After a few days the fit is more complete, and all parts of the body, which are not paralyzed, have convulsions. According to the seat of the injury, the parts that have convulsions greatly vary. When the lesion is near the last dorsal vertebra or the first lumbar, and consisting of a section of a lateral half of the spinal cord, convulsions take place everywhere, except only the posterior limb on the side of the injury. If the lesion consists of the section of the two posterior columns and a part of the lateral columns, and of the gray matter, convulsions take place everywhere without exception, but with much more violence in the anterior parts of the body. When the lesion exists at the level of the last dorsal ver-

tebræ and consists in a transversal section of the two anterior or of the two lateral columns, convulsions are ordinarily limited to the anterior parts of the body; but it is a very interesting fact that they are not always confined to these parts, the two posterior limbs having sometimes very strong tetanic spasms, at the same time that there are clonic convulsions in the anterior limbs. After a transversal section of the central gray matter, or of the whole spinal cord, in the dorsal region, convulsions are limited to either the anterior or the posterior parts of the body.

§ III. Convulsions may come either spontaneously, or after certain excitations. The most interesting fact concerning these fits is that it is possible, and even very easy, to produce them by two modes of irritation. If we take two guinea pigs, one not having been submitted to any injury of the spinal cord, and the other having had this organ injured, we find, in preventing them from breathing for two minutes, that convulsions come in both; but if we allow them to breathe again, the first one recovers almost at once, while the second continues to have violent convulsions for two or three minutes and sometimes more. There is another mode of giving fits to the animals which have had an injury to the spinal cord. Pinching of the skin in certain parts of the face and neck is always followed by a fit. If the injury to the spinal cord consists only in a transversal section of a lateral half, the side of the face and neck which, when irritated, may produce the fit, is on the side of the injury; *i. e.*, if the lesion is on the right side of the cord, it is the right side of the face and neck which are able to cause convulsions, and *vice versa*. If the two sides of the cord have been injured, the two sides of the face and neck have the faculty of producing fits, when they are irritated. No other part of the body but a portion of the face and neck has this faculty. In the face, the parts of the skin animated by the ophthalmic nerve cannot cause the fits; and of the two other branches of the trigeminal nerve, only a few filaments have the property of producing convulsions. Among these filaments, the most powerful, in this respect, seem to be some of those of the suborbitary and of the auriculo-temporalis. A few filaments of the second, and perhaps of the third cervical nerves, have also this property of producing fits. In the face, the following parts may be irritated without inducing a fit: the nostrils, the lips, the ears, and the skin of the forehead and that of the head. In the neck, there is the same negative result when an irritation is brought upon the parts in the neighborhood of the median line, either in front or behind. On the contrary, a fit always follows an irritation of some violence when it is made in any part of a zone limited by the four following lines: one uniting the ear to the eye; a second from the eye to the middle of the length of the inferior maxillary bone; a third which unites the inferior extremity of the second line to the angle of the inferior jaw; and a fourth which forms half a circle, and goes from this angle to the ear, and the convexity of which approaches the shoulder.

§ IV. Can we attribute to the great degree of sensibility of the face and of the neck the property exclusively possessed by these parts to produce fits in animals which have had their spinal cord injured? In other words, is it in consequence of the pain felt, that there are fits in these circumstances? This explanation is quite in opposition with the following facts. 1st. When the injury exists only in one of the lateral halves of the cord, the face and neck on the other side have not the power of producing fits, whatever is the degree of the irritation upon them. 2d. In the same case, the posterior limb on the side where the cord is injured, is in a state of hyperæsthesia, and, nevertheless, the most violent irritations upon this limb do not produce fits. 3d. It is sometimes sufficient to touch the face or the neck, or even to blow upon them, to produce the fits. Therefore, unless we admit that there is an extraordinary degree of hyperæsthesia in the parts which possess the faculty of producing the convulsions when they are irritated, we must admit that it is not the pain which causes these convulsions. There does not seem to be more sensibility in these parts than in other parts of the body. When a fit, or rather a series of fits, have taken place, and when, consequently, the power of having them is much diminished, it is easy to ascertain that these parts seem not to be more sensitive than others. The animal does not cry more when they are pinched or galvanized, than when other parts are irritated in the same way.

The production of fits by the irritation of certain parts of the neck and face, seems to belong to reflex actions. It is well known that an irritation of the skin and of the mucous membranes may easily produce certain reflex movements, which very rarely take place after an irritation of the trunks of the sensitive nerves. For instance, coughing is almost a constant result of an irritation of the mucous membrane of the larynx and of the bronchial tubes, while it is very rarely produced by an irritation of the trunk of the par vagum. Something similar exists for the production of convulsive fits when the face is irritated in animals upon which the spinal cord has been injured. If we lay bare the nerves of the face and neck of these animals, we find that even the greatest irritations upon them do not produce a fit. Besides, if we dissect a large piece of the skin of the face, so as to let it be in connection with the nervous centres only by the suborbital nerve, we find that the irritation of this piece of skin is still able to produce convulsions, while the irritation of the very nerve which connects it with the brain does not produce any. It seems, therefore, that it is in the cutaneous ramifications of certain nerves of the face and neck that resides the faculty of producing convulsions in the animals upon which I have injured the spinal cord. There is, in that case, as I will show hereafter, something resembling what takes place in man in cases where a ligature around a limb is sufficient to prevent a fit of epilepsy.

§ V. What is the nature of the fits that we find in animals upon which the spinal cord has been injured? I think these fits ought to be considered as epileptic. The following description of these con-

vulsions will show that, if they are not positively epileptic, they are at least epileptiform. When the attack begins, the head is drawn first, and sometimes violently, towards the shoulder, by the contraction of the muscles of the neck, on the side of the irritation; the mouth is drawn open by the contraction of the muscles of the neck, which are inserted upon the lower jaw, and the muscles of the face and eye (particularly the orbicularis) contract violently. All these contractions usually occur simultaneously. Frequently at the same time, or very nearly so, the animal suddenly cries with a peculiar hoarse voice, as if the passage of air were not free through the vocal chords, spasmodically contracted. Then the animal falls, sometimes on the irritated side, sometimes on the other, and then, all the muscles of the trunk and limbs that are not paralyzed become the seat of convulsions, alternately clonic and tonic. The head is alternately drawn upon one or the other side. All the muscles of the neck, eyes and tongue contract alternately. In the limbs, when the convulsions are clonic, there are alternative contractions in the flexor and the extensor muscles. Respiration takes place irregularly, on account of the convulsions of the respiratory muscles. Almost always there is an expulsion of *fæcal* matters, and often of urine. Sometimes there is erection of the penis, and even ejaculation of semen.

These are the features which render these fits very much like epilepsy. But they seem to differ from this disease, by the three following characters: 1st. The animals sometimes cry during the fits, when they are irritated, and it seems, therefore, that they have not lost their sensibility. Now as the loss of sensibility is considered a symptom essential to epilepsy, it appears that we ought not to consider as epileptic the convulsions existing in these animals. But, we cannot admit this as a decisive objection, when we remark that frequently they seem to be deprived of sensibility, and that, in man, during true fits of epilepsy, there are sometimes periods where sensibility is not lost. 2d. These animals usually have no foam at the mouth, and this symptom has been considered by many writers as essential to epilepsy; but there can be no doubt that there are cases of epilepsy without any foam. Besides, we may easily understand why there is no foam ordinarily in animals: usually their fits do not last long enough. 3d. The fits in these animals are most frequently a series of fits lasting two or three minutes, and separated one from the other by a period of one or two minutes, during which the animals are able to rise and to stand on their feet. In this respect these animals differ from the majority of epileptic men, who have not a recurrence of fits after so short a period of calm; but there are cases of rapidly-recurring fits in man, and therefore we cannot deny that the fits of these animals are true epileptic fits, on the ground that they have that peculiar character of rapid recurrence.

The apparent differences between the fits in animals which have had the spinal cord injured, and true epilepsy in man, ought not,

therefore, to prevent our considering them as epileptic fits. Not only the convulsions resemble those of true epilepsy, but the fits are not mere accidents, and they come by series of two or three, once a week, once a day, or even ten or twenty times a day, and the disease lasts for years. Besides, we find, after long and violent fits, that these animals are, for a time, in a state of drowsiness, like men after epileptic convulsions. It seems rational to conclude, from this discussion, that if the convulsions of these animals are not truly epileptic, they are at least epileptiform.

§ VI. The facts expressed in the preceding parts of this paper lead to many interesting conclusions. *First*, they give a positive proof that an injury to the spinal cord may be the cause of an epileptiform affection. *Secondly*, they show a wonderful relation between certain parts of the spinal cord and certain branches of some of the nerves of the face and neck. *Thirdly*, they show that epileptiform convulsions may be the constant consequence of slight irritations upon certain nerves. *Fourthly*, they show that even when an epileptiform affection has its primitive cause in the nervous centres, some cutaneous ramifications of nerves, not directly connected with the injured parts of these centres, have a power of producing convulsions, that other nerves, even directly connected with them, have not. *Fifthly*, they show that the cutaneous ramifications of certain nerves may have the power of producing convulsions, while the trunks of these nerves have not this power.

HEALTH OF FACTORY OPERATIVES.

[Communicated for the Boston Medical and Surgical Journal.]

Messrs. Editors,—In your Journal of the 13th inst. appeared the following paragraph :—

Life in Factories.—We find, in the *Bee* newspaper of this city, the following remarks upon this important subject :—"Careful examination has been made of the health of operatives in Nashua (N. H.) and other manufacturing places, and the results are briefly these : that life in the mill is one of danger to health. The girls suffer from many painful diseases which are induced by their employment and modes of life. Their sleeping rooms are too small, or too full of bad air. It is, however, said that there are not more deaths in factory places than elsewhere. But if it is true that the bills of mortality in those towns are not strikingly large, the reason is obvious. The operatives, when they become sick and can work no longer, go home to die. Worn out in health and spirits, they seek the family roof, still clinging with nature's fondness to the hope of returning health. But they cannot escape the disease contracted at the *picker*, the loom or the spindle; it goes with them to their home, and completes the work of destruction there. Fortunate are those who have homes to return to, and kindred and friends to be near them in sickness and death."

Such statements as the above, passing the rounds of the newspaper press, are calculated to convey false or exaggerated impressions as to the unhealthiness of manufacturing places and pursuits. A few

individual cases are apt to be taken for general facts, and the sympathies of all concerned are so easily wrought upon, that the real truth and the whole facts do not fairly come before the public for consideration. The following statistics and remarks connected with the state of health in Lowell, may serve to throw some light on this subject.

There are two methods of ascertaining the relative health between different places. The one is, the ratio of mortality for a certain time to the whole number of inhabitants in any given place, compared with that of some other place. The other method is, by ascertaining the average age of all those dying in any one place for a certain time, compared with the same fact in some other place. To make this comparison perfect, the inquiry should extend over a long series of years, and all the conditions in each place or class of persons selected for the comparison, should be taken into the account. As it is impossible to find or make all the conditions affecting health the same in different places or classes of persons, we can only make an approximation to mathematical accuracy, by allowing, as far as possible, for whatever peculiarities or inequalities may exist in the comparison.

From a careful examination of the records of mortality in this city for twenty-five years—and these records have been faithfully kept—the following facts are obtained.

From 1830 to 1840, comparing the number of deaths with the whole population each year, we find that the average rate of mortality was 1 in 52.82 persons; from 1840 to 1850, 1 in 49.81 persons; and, from 1850 to 1855, 1 in 54.27—making the average yearly rate for these 25 years, of *one death in 52.30 inhabitants*.

In some country towns in New England, the rate of mortality for the same length of time is considerably less, but, in many towns and nearly all the large cities, it is greater. In Boston, the ratio is 1 in 42 to 47 inhabitants; in New York, 1 in 30 to 35; and in Philadelphia, the healthiest of any of the large cities in the United States, it is 1 in 43 to 48 inhabitants. According to the returns of deaths, as ordered by the Legislature, for the whole State of Massachusetts, compiled now for about fifteen years, the rate of mortality does not vary much from 1 in 50 inhabitants. In towns indicating the highest amount of health, the rate ranges from 1 in 60 to 65, and, in those most unfavorable to health, 1 in 35 to 40. In cities and villages where a foreign population exists to any considerable extent, the mortality is greatly increased. In examining as to the relative health of different places, this constitutes an important element in the account.

From a careful examination of the report of deaths in Lowell for several years past, it was found that the mortality amounted to twice as much among the foreign, as among the American population. This general fact may not hold true in other places. Now, in applying the rate of mortality exclusively to the American portion of the citizens, the rate, for a long series of years, will range

somewhat above 1 in 60 inhabitants. Few towns in the State, made up entirely of a native-born population, can present, for a long period of time, more favorable tables of mortality. Lowell, then, whether compared as a whole, with other cities and towns in New England, or its American population with the same class in other places, presents a remarkably favorable state of health for the last twenty-five years. With such data before us, it cannot be said that the manufactures of this city are very unfavorable to health and longevity, unless the conditions involved in the comparison are found to be very unequal.

What, then, are the inequalities or peculiarities which should be considered in this comparison? It is alleged, in the paragraph heading this article, which of course would affect the bills of mortality, that many operatives become sick, and go to their homes or friends in the country and die. Now while there is some truth in this statement, the general impression is altogether over-estimated. There are, perhaps, not over 4,000 operatives—one third of all working in the mills here—but what belong in the place, have their homes and friends here; and then only a small fraction of these 4,000, when they sicken, go to the country to die. A majority of deaths occur from *acute* diseases, and very few, comparatively, who are attacked with such diseases, have timely warning, or find it convenient to leave before it is too late. While the few cases that occur of individuals going home to the country to die, may make much talk and show of numbers, it really diminishes but little the bills of mortality. Besides, many individuals and families of feeble health and broken constitutions move here from the country, with a view to in-door work and light employ, who cannot sustain more laborious occupations elsewhere. The increased mortality in such classes would go some way to off-set the number of those who return to the country to die.

Again:—The great *changes*, constantly occurring here, are unfavorable to health. All changes in locality, labor, air, diet, water, &c., are attended with more or less exposure. It is well known that individuals and whole families encounter more sickness the first year of their residence in a new place, than they do for a large number of years afterwards.

Again:—While there are very few aged people here, compared with many other places, to increase the rate of mortality by their deaths, there is an off-set to this inequality, from the fact of a much greater number of deaths occasioned by casualties here than would be found in most places. From 1830 to 1846, a period of fifteen years, we find in the bills of mortality 231 deaths reported as occasioned by drowning, accidents with machinery, &c.

It may be said that a larger proportion than usual, of the population of Lowell, come within an age—say from 15 to 45—which does not present so great a mortality as that under 15 or over 45. Some allowance should undoubtedly be made for this difference or peculiarity in the population of manufacturing places. But, then,

there is connected with this fact another circumstance which will, in part, off-set the inequality above mentioned. There is a *disproportion of births* in Lowell, to the whole population, as compared with some other, and particularly older, places. A great majority of the families are young—just starting in life and in the way of increase, especially the foreign portion. Now, it is well known that the mortality of children under 5 years of age is far greater than of those older, particularly in cities, where about one half of all infants born, die under 5 years of age.

There are other conditions or circumstances affecting the rate of mortality, but those mentioned are thought to constitute the more important. As we cannot make an exact allowance for all these varying and different conditions in places, affecting health, the comparison cannot be carried out with perfect accuracy.

There are, undoubtedly, many evils connected with what is denominated the "*Factory System*," which are calculated to impair health and shorten life—such as sleeping in small, crowded rooms; hurried meals; excessive labor; working in a heated atmosphere; bad air; exposure to sudden changes of temperature, &c. But, then, are these evils confined to the cotton and woolen manufactures? How is it with those engaged in the various mechanical pursuits—working or trading in small shops, sewing on cloth, straw, shoes, &c.? What occupations are there, in which females are engaged to any extent, that are not attended with great exposures to health? If a comparison could be thoroughly instituted between the shoe and cotton manufactures, in the effects on health, we are confident *the latter* would not suffer in the comparison. In France, Germany and England, after the most careful examinations, it has been found that the evils first attributed to the "*Factory System*," were greatly magnified;—that they applied to the *domestic* relations, and *out-side* exposures of the population, rather than necessarily to the *industrial* part of it, and that manufacturing pursuits, *as such*, were not more injurious to health than many other occupations. Such, it is believed, would be the result of an examination in our own country.

NATHAN ALLEN.

Lowell, Nov. 17th, 1856.

SURGICAL NOTES.

BY S. KNEELAND, JR., M.D., BOSTON.

[Communicated for the Boston Medical and Surgical Journal.]

DURING the preparation of an analytical index of the Surgical Records of the Massachusetts General Hospital, from its establishment in 1821 to 1856, a period of twenty-five years, some facts of statistical value came to my notice, which may prove interesting to the profession. I select a few of the most striking, alphabetically arranged, to obtain which, it would be necessary for the student to employ several hours of tedious examination of manuscript.

AMPUTATIONS.—Of the *arm*, 20 cases, of which 4 were fatal, though only two depended on the operation itself; the other two were scrofulous cases.

Of the *fore-arm*, 18 cases; 1 death.

Of the *leg*, 90 cases, and 19 deaths, caused either by the severity of the accident, fracture of the skull, or other accompanying injury.

At the *shoulder-joint*, 6 cases, and only 1 death, although the accidents were very severe.

Of the *thigh*, 97 cases, and 26 deaths, of which 5 were from the severity of the accident.

ARTERIES, ligature of.—The *external iliac* was tied 4 times, with one death in two days. The *internal iliac* was tied once, proving fatal in a week.

CANCER.—Of the *lower lip*, 58 cases, of which only 5 were in females, and generally beyond the age of 50. In most, the habit of pipe-smoking was acknowledged. Many eminent surgeons, among others the late Dr. J. C. Warren, have considered this habit one of the most frequent exciting causes of labial cancer.

Cancer of the tongue, 20 cases, of which 5 were females—almost always in tobacco-poisoned mouths. This comes on at an earlier age than cancer of the lip.

EPULIS, 9 cases, all females. The ages ranged from 15 to 59 years. The average age, 31½ years.

FISTULA IN ANO, 149 cases; of which only 14 were females, or 1 in about 10½. I do not find it mentioned in surgical works that this disease is most common in males; but the above proportion would seem to indicate that it is so. The disproportion can hardly be accounted for on the natural repugnance of the female sex to submit such lesions to the surgeon's notice; as the cases of hæmorrhoids, and other diseases of the rectum requiring operations, in the hospital wards, show no such disproportion between the sexes. Larger tables might change the proportion somewhat, and this will do for a beginning.

FRACTURES.—Fracture of the *ulna* is rare, compared with fracture of the *radius* and with fracture of both bones, notwithstanding the exposed condition of the olecranon; being in the proportion of 1 to 2. The same holds true in regard to fracture of the fibula, when compared with fracture of the tibia and that of both bones of the leg.

FUNGUS HÆMATODES, 17 cases, of which 6 were in males.

HARE-LIP, 86 cases, of which 29 were females.

HIP DISEASE, 181 cases, of which 63 were females.

LUPUS, 8 cases, of which 3 were females.

NERVES, division of, for obstinate neuralgia, 9 cases.

Facial, 3 cases; of which 2 were relieved, 1 not relieved.

Inferior maxillary, 1 case, cured.

Inferior dental, 1 case, cured.

Infra-orbital, 3 cases; 2 cured, 1 much relieved.

Ulnar, 1 case, relieved.

STRICTURE, OF OESOPHAGUS, 14 cases, of which 3 were in females.
TETANUS AND TRISMUS, 8 cases, of which 7 were fatal in from 2 to 19 days.

TORTICOLLIS, 18 cases, of which 5 were in males.

VAGINA, *occlusion of*, 5 cases; operation in 3 cases, of which 1 was successful, and 2 relieved.

VEINS, *introduction of air into*, 2 cases: 1 while removing a tumor in the neck, in which recovery took place; the other into the axillary vein, during removal of tumor from the axilla—fatal.

WOUNDS, *suicidal, of throat*, 30 cases, of which 4 were females; only 2 cases proved fatal, at the end of five and six days. It is rare that the suicide effects his object in attempting to cut his throat; from ignorance of the situation of the vessels, the cut is generally made too high up and too much in front; by the time the skin is cut, the pain prevents the completion of the suicidal act—the trachea is cut, but the great vessels escape, as we see by the small proportion of deaths among the cases, only 1 in 15.

Portage Lake, Mich., Oct. 22, 1856.

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE SUFFOLK DISTRICT MEDICAL SOCIETY.

L. PARKS, JR., M.D., SECRETARY.

SEPT. 27th, 1856.—The following paper was sent to the Society by Dr. H. R. STORER, who was unavoidably absent.

Placenta Prævia with Twins.—Two days since (Sept. 25th), I was suddenly summoned by Dr. Hobbs to a patient of his own, who was then lying dead. I found the woman, Irish, perhaps 30 years of age, and previously the mother of a single child. She had thought herself about eight months gone, and at intervals, during several weeks, had passed blood from the vagina, with the ordinary symptoms of placenta prævia, which Dr. Hobbs had very properly diagnosed. Labor pains had commenced the night before, and with alarming hæmorrhage. Dr. Hobbs was then called, found the patient's strength good, her pains absent, the os but partially dilated, and had plugged the vagina, expecting to be notified of any change for the worse. Hearing nothing from the patient, he answered another obstetric call that night, and visiting his first patient next morning, found her four hours dead from sudden and profuse flooding. Much trouble being made by the friends, who charged him with culpable neglect, I was called in his defence and to deliver the woman.

The children having been long dead, I preferred doing so by abdominal section rather than *par vaginam*, that I might better study the case. By preliminary vaginal examination, I found the placenta freely bulging through a well-dilated os, but still completely attached throughout its circumference. The abdomen was then opened, and it became at once evident, before incising the uterus, that there were twins. These were both removed from the uterus, with the double placenta, without rupturing the membranes. The larger, a boy of perhaps six pounds, occupied the left side, its head presenting; the other, a girl, presented by the feet. The membranes were completely separate, save within an inch of the placenta, which were fused

into one. Each sac filled with liquor amnii, and each funis with the battle-door attachment and to the left—so that that of the right sac was implanted almost at the very line of fusion of the two placenta. These last were situated directly over the os, and were still extensively attached. I was not permitted to remove the uterus, and cannot, therefore, so decidedly speak of the nature of the attachment of the placenta with the uterus as I could wish. My impression, however, is with Madge, as laid down by him in the last number of Braithwaite, that there is no *direct* vascular communication between the mother and fœtus, but that there is a membranous septum between the placenta and uterine wall. Fragments of such are very evident on inspection of almost any placenta. My belief now is that it exists *entire*. The placenta, in this case, were readily separated from the uterus, and their early and direct removal might have checked the hæmorrhage.

Strangely enough, no case of *placenta prævia with twins* seems ever to have occurred in the practice of any noted accoucheur, or at any lying-in hospital. With only two exceptions,* and these from other men's practice and but incidentally mentioned, none are recorded in any work on obstetrics; the possibility even of such a coincidence I can find no where referred to.

There seems, however, *a priori*, no good reason why this coincidence should not occur, and as often, proportionally to the relative frequency of twins, as its occurrence with single children.

On investigating the matter, I am able by statistics to prove that this is the case, and that the actual ratio of this coincidence is strikingly identical with what might have been expected.

Among Dr. Trask's 253 cases of *placenta prævia*, gathered from every source (*Trans. Amer. Med. Association*, 1855), he had found but one such case, and this in a foreign journal.

Our friend Dr. Read, who has for years been at work upon the subject, and whose series of 518 well-authenticated cases far outnumbers Dr. Trask's celebrated collection, informs me of four others—three of them from European sources, the other occurring in his own practice in this city and much similar to my own. Here, also, the patient had been under the charge of another practitioner, and Dr. Read was only called in to deliver the woman after death, which he did *per vaginam*.

From statistics in my possession, of several hundred thousand midwifery cases, I find—

1st. That *placenta prævia* with a *single* child occurs once in about every 900 cases.

2d. That in about every 80 labors one pair of *twins* are born.

3d. That by comparing these ratios together, we should expect to find *twins with placenta prævia* once in every 72,000 cases.

With Dr. Read's 515 cases of *placenta prævia*, all yet on record, I have compared the 6 cases of twins—the four already on record, Dr. Read's and my own—and find that twins occur once in about every 85 cases of *placenta prævia*. This result, placed in ratio to the frequency of *placenta prævia* itself, once in about 900 cases, affords evidence—

4th. That the actual coincidence of *twins with placenta prævia* is once in about 76,500 cases.

It will thus be seen how extremely rare this occurrence is, and how improbable for a person who had once met with it to have that fortune again.

* Lerret, Accouch. Lab.; J. Ramsbotham, Pract. Obs.

Treatment of Croup.—In the course of a discussion on the subject of the treatment of croup, suggested by Dr. Ayer, the merits of various drugs as emetics in the management of that disease, were discussed. Subsulphate of mercury was advocated on account of the suddenness of its action, and objected to because of its violence. The use of antimony, which was preferred by one speaker to the turpeth mineral, was deprecated by others as a remedy for children, on account of its very depressing effect. A combination of calomel and ipecac, in doses of two grains of the former with three of the latter, was regarded with especial favor by Drs. Homans and Bowditch, as being a mild yet efficient emetic for children. Dr. Bowditch dwelt upon the value of nitrate of silver as a topical agent in croup. Ten years ago, he considered lymph on the tonsils in that disease, as almost equivalent to a death warrant; but now, he felt the prognosis to be far less grave, provided nitrate of silver were properly used. That agent would sometimes require to be employed as many as six times a day, and in some cases as often as dyspnoea would set in. As a means of conveying the solution to the throat, he preferred the sponge, though the syringe of Dr. Ira Warren he considered a valuable instrument. Each of these two kinds of apparatus he thought had its peculiar advantages, and the two might in some cases be beneficially conjoined. The solution should be applied to the glottis, upon which the sponge when used should be pressed.

Hydrothorax.—Dr. BOWDITCH also offered some remarks upon the subject of hydrothorax. A case had lately come to his knowledge, in which a surgeon in another State allowed a man to die of hydrothorax rather than submit him to the operation of puncturing the chest. Dr. B. took the opportunity to say, in this connection, that he had never seen thoracentesis do any harm, but had often seen it produce great relief to suffering when it did not, as it often did, rescue from death. He mentioned the following cases, being additional to those he had previously reported.

A man, aged 75, affected with general dropsy, had suffered from orthopnoea for three months. The left side of his chest was filled with fluid. Five pints of serum were removed from his chest with relief to the dropsy, and the patient recovered from all symptoms except those usually accompanying cardiac disease. Of the cardiac lesion causing these symptoms he died suddenly, about a year afterwards.

A female, aged 28, was seen three years since. She had been ill two weeks, and presented intense orthopnoea, a haggard countenance, cold skin, nearly pulseless wrists. She had been pregnant 4½ months. Dr. B. punctured her chest ten times during the subsequent three or four months, and finally made a permanent opening low in the side. Pus was discharged from first to last, and at the end of nine months she was comparatively well. The patient completed the full term of gestation and bore a living child, which, however, was puny and died at the end of a few weeks. She is now perfectly well, and performs all the duties of a housewife.

In two other more recent cases the treatment has just been completed. In both there was pus in the cavity of the chest. One was punctured twice. The other had a permanent opening made, through which the air was allowed to pass freely. It was impossible, indeed, to prevent the air from entering. Both of these patients were very ill at the time of operating, and would have died from the severe dyspnoea, if an operation had not been done. The second was twice left by the attending physician, as in an utterly hopeless condition. Thoracentesis alone saved her life. Both are now doing well, though the latter—a child—is still delicate, being able,

however, to join her companions in play, seeming in a fair way to recover entirely.

Dr. Bowditch's experience led him to believe that there was no danger at all from slight punctures of the lung in tapping the chest.

Dr. H. O. STONE said that he had lately heard Trousseau lecture in Paris on thoracentesis, and state in the course of his remarks, that the operation was in his opinion no more formidable than the application of a blister.

EXTRACTS FROM THE RECORDS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT. BY F. E. OLIVER, M.D., SECRETARY.

SEPT. 22d. *Larvæ of the Musca Vomitoria, or Flesh Fly, from the Ear of a Child.* Dr. BETHUNE showed the specimen.

The patient was a child 3 years old; had had otorrhœa for a year, which ceased some time since; had pain the day before Dr. B. saw her, at which time the mother extracted from the ear, by the aid of a hair pin, a maggot like the one exhibited. Considerable hæmorrhage had taken place just before. On examining the ear, Dr. B. found another, which he extracted.

Dr. Bethune remarked that these cases are rare, extremely rare, but that a case fell under the notice of Dr. HOOPER, about a year since. Dr. B. attributed the pain in the ear to the activity of the worm.

Dr. HOOKER, of Cambridge, remarked that while a student of medicine he extracted from the ear of a patient a dozen of these larvæ, of the size of that exhibited.

SEPT. 22d. *Malignant Disease of the Right Ovary.* The specimens were from the right ovary of a woman whose case was read by Dr. STORER, having been sent to the Society by Dr. TOWNSEND, of South Natick, and were exhibited by Dr. ELLIS. They consisted of a mass of hair containing fatty substance, a portion of the larger cyst alluded to in the report of the case, and the entire smaller cyst, with the ovary attached, containing in its walls the bony points mentioned, somewhat resembling human teeth.

For four years past, since the birth of her last child, the patient had had occasional paroxysms of pain in the right ilium; for four months past, the symptoms had been more frequent and acute, and a tumor, first noticed in the median line, had developed itself. For eight weeks past, this tumor had increased, in common with another in the right ilium, more rapidly; for two weeks past, the right tumor had increased very rapidly, and exhibited unequivocal signs of fluctuation, with continued paroxysms of pain, occasional dysuria, intestinal disturbance, nausea, diarrhœa and constipation alternating.

On Monday, the 8th, she was taken up as usual, had a dejection in the chair, and soon complained of a peculiar feeling of oppression and sinking, followed by acute pain and enormous distension of the abdomen. Dr. T. was summoned in haste, and though the distension was so great that the tumor could not be examined critically, he supposed a rupture of the sac had taken place, and that the event was at hand. She continued sinking, but gradually growing easier, till Tuesday, the 9th, at 12, M., and was sensible at 7, A. M. of that day. Opiates and stimulants, by mouth and enemata, were the appliances. Vomiting of melanotic fluid took place, the night before death, and a similar fluid exuded from the nares and mouth after death.

Wednesday, at 9, A. M., Dr. Partridge assisting, and Drs. Hoyt and Russell being present, a *post-mortem* examination was made. The cavity of

the abdomen contained two gallons, at least, of serum and pus. The intestines were everywhere covered with adhesions, old and new. The peritoneum everywhere highly injected, covered with every stage of false membrane, and bathed in pus. The tumors proved to be the right ovary, in two distinct lobes of large size, and several smaller ones—the right and left tumor being one and the same organ. The ovary was closely adherent to the cæcum, and was one enormous mass of cerebriform disease, with a large sac of pus in the right lobe, which had been poured out into the peritoneum. At the base of the organ, below the sac of pus, was found a mass of matted hair; another mass in another sac of smaller size, and spiculæ of what appears to be bone, in the walls of the sac. The left ovary was enlarged to the size of an egg, and contained a mass of soft homogeneous cheesy matter, of a dark-brown color, and also had spiculæ of bone in its walls. The uterus was healthy, the os being only slightly ulcerated. The bladder was empty, much contracted, and firmly adherent, posteriorly, to the uterus. The stomach contained some four ounces of the black fluid, and was somewhat injected. The intestines were otherwise healthy; also the kidneys and liver. The lungs were infiltrated with frothy serum, and the cavity of the thorax contained about twelve ounces of serum. There were no tubercles.

SEPT. 22d. *Partial Fracture of the Neck of the Femur in a Man 44 years of age.*—Specimen shown by Dr. JACKSON.

The fracture, which appears as a mere crack in the bone, commences anteriorly just above, but very near to, the insertion of the capsular ligament, runs along this insertion for about an inch, and then extends directly upwards to the margin of the head of the bone. From this last point it crosses the upper surface of the neck almost in a straight line, and at a little distance from the margin of the head, but afterwards approaches very closely to this margin posteriorly; it then turns downwards and obliquely forwards, and stops at a point about half way between the small trochanter and the head of the femur, and two thirds of an inch or more anteriorly to the line of this trochanter. The fracture then involves about three fourths of the neck of the bone; the inner-anterior portion only being spared. There is considerable motion between the neck and the shaft, and the fracture could undoubtedly be completed without the application of any extraordinary force. Dr. J. referred to other cases of partial fracture; but a fracture of this sort, as occurring in this situation and in a fully adult subject, he believed had never before been described. There was also, in this case, a transverse fracture of the same femur midway, with a split extending upwards nearly to the neck of the bone; and still further, a fracture of the spine. The patient, a laboring man, fell through two stories of a building and down upon a hard floor. On the same day he entered the Mass. General Hospital, and on the 18th day from the time of the accident, he died. The femur is perfectly healthy in structure, and no changes are observable in the bone about the fracture.

Dr. MUSSEY, of Cincinnati, remarked that this specimen was one of great interest, and alluded to the case of a hospital patient that fell under his care, in which he suspected the same accident. The patient had fallen; there was lameness of the hip; *no shortening, no eversion*. On the following day, still no shortening could be discovered. During that night he walked about the ward. On the next day, the limb was found to have shortened to the extent of one fourth of an inch. There was evident fracture of the neck of the thigh bone, and an extending splint was applied,

and kept on for three months. The patient left the hospital with the limb shortened to the extent of three quarters of an inch. Dr. M. questioned whether this were not a partial fracture, in the first instance, afterwards rendered complete by walking.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, NOVEMBER 27, 1856.

TREATMENT OF SPERMATORRHŒA.

THE treatment of spermatorrhœa by mechanical means, which has been proposed of late years, seems to have captivated the public mind, if it has not gained the confidence of the medical profession—at least, if we may judge from the letters we receive from sufferers, or imaginary sufferers from that complaint, asking for our opinion of the various contrivances which are recommended for the cure of involuntary emissions of semen. These applications are intended either to give warning of an approaching erection by causing pain, or else by compressing the seminal ducts, or the urethra, to prevent the discharge of semen. To the former kind belong the so-called *spermatorrhœa rings*, which consist of a metallic hoop, furnished on the inside with teeth, against which the penis is pressed during erection. Among the latter is an invention of M. Trousseau, consisting of a smooth, bulb-shaped body, to be worn in the rectum, which acts by compression against the ducts of the vesiculæ seminales to prevent the escape of semen. To the same class belongs, we presume, an extraordinary machine invented by a sufferer (real or imaginary) from seminal emissions, and of which an account is given in the *Medical and Surgical Reporter* for November. "It consists of a bed plate, upon which the organ rests, while a plate above it is pressed downwards by a screw in the centre of a round box, in which is coiled a spiral spring. Below this box is an ingenious arrangement of cog-wheels, span-wheels, adjustable screws, &c. &c." (!) Really, Dr. Tushmaker's machine for extracting teeth, which was a combination of the lever, pulley, wheel and axle, inclined plane, wedge and screw, was nothing to this.

In our opinion, all mechanical means for the cure of this affection are useless, if not pernicious. In patients of an erotic imagination, their very contact is sometimes enough to produce the effect they are intended to cure; and supposing them to be effectual in preventing an emission, as they cannot be supposed to affect the cause of the symptom, there is no reason why the disease should not return when the apparatus is laid aside. Excessive involuntary seminal emissions, whether the consequence of general debility, self-abuse, a prurient imagination or stimulating diet, can be more effectually cured by removing the cause of the symptom than by mechanical appliances. The proper treatment consists in tonic medicine, the cold bath, early rising, simple diet, regular occupation and the avoidance of improper thoughts and habits. In some cases, where the disease seems to have its origin in morbid irritability of the urethra or prostatic ducts, the application of the nitrate of silver, as recommended by Lallemand, may be used with advantage, after other means have failed.

With regard to the danger from occasional, involuntary seminal emissions, the public mind has been abused by quacks, who take advantage of the ignorance, the credulity and the fears of the community to magnify into

a disease what is only a natural function. Involuntary seminal emissions, occurring occasionally during sleep, in persons who are continent, are a natural relief to the accumulation of sperm, which would otherwise give rise to inconvenience from its presence. We imagine that there are few healthy persons in whom this phenomenon does not occur under these circumstances. How often it may be repeated without affecting the health, must depend upon individual temperament, habits of life, and other circumstances. An emission once in two or three weeks cannot exercise any injurious influence; and there are probably many persons in whom it occurs much oftener, without evil consequences. The same remarks will apply to those slight discharges of mucus (though often containing a few spermatozoa), during defecation, which are sometimes produced by a costive state of the bowels, and the pressure of the hardened feces upon the vesiculæ seminales. These, like the occasional involuntary discharge during sleep, frequently give rise to great apprehension on the part of the patient, especially if his imagination has been excited by the books or advertisements of pretended physicians who have a pecuniary interest in propagating these erroneous notions. We have never known it, however, to be followed by evil effects.

A FUND FOR THE POOR DOCTOR.

MESSRS. EDITORS,—I was very much pleased in reading your remarks in the Journal of Oct. 22d, in regard to the formation of a society, and the securing of funds, for the purpose of assisting "the poor doctor" and his family, in case of need. For many years past, this idea has often occurred to me, and I have often wondered why some of the "nobles" in our profession did not take hold of this matter in good earnest. Your remarks are certainly opportune and pertinent. How many a poor, but worthy physician could be saved from harrowing want, and made comfortable and happy, by a very little "cash assistance," coming at the right time, which such a society might give. How many young and talented physicians might be saved to the profession, by a little "material aid" in time of need, who are now lost to it for the want of the very "aid" such a society might easily give. I hope you will keep this grand idea before the profession until something tangible is brought to pass. I have no doubt, if proper measures were taken, that a fund of ten or fifteen thousand dollars might be secured in one year's time, among the profession alone, in Massachusetts. It is a subject, it seems to me, that all would feel an interest in, as each one may be a recipient of its benefits in case of need; while among a generous profession, as ours is acknowledged to be, there must be many with a large share "of this world's goods," who would consider it a privilege to give liberally. Even if this should not be so, provided it be understood, for instance, that no benefits be given until the sum of ten or fifteen thousand dollars shall have been at interest one year, how easily the members of the Massachusetts Medical Society could raise this sum, provided all take hold, and scarcely one feel the "burden of his tax;" though I would have the "fund" the *free-will* offering of its members. Oh! how many an old and worn-out physician, who has served his day and generation faithfully, and with honor, but who, nevertheless, failed to lay by anything for old age, from one cause or another, by the little aid from such a fund might have his "latter days" made comfortable and happy. May God speed on the good work. Would it not be well to call a convention of the physicians of Massachusetts, to take this interesting subject into consi-

deration? Personally, I care not how the subject is brought about, provided the good work is accomplished. As the politicians say, "keep it before the people," and the work will be done.

NORFOLK.

November, 1856.

MEDICAL SCHOOLS &c., IN PHILADELPHIA.

MESSRS. EDITORS.—The attendance of students at the institutions here is large. The Jefferson, as usual, leads off with from five to six hundred, while the University keeps about one hundred behind. The appearance of the students at lectures is interesting. It differs much from that presented in the Boston school. They have a sort of "take-it-fair-and-easy air," indicated by wearing hats, feet elevated, and chewing tobacco, in lecture time. In fact, the last seems indispensable to a Philadelphia student, and the floors of the audience rooms are so much covered with saliva that one can hardly set his foot on a dry place. When a professor is applauded (and it is always done by stamping), the expectorations, which have become dried in the interim of lectures, often arise in such a cloud of tobacco and epithelium dust, that the uninitiated are obliged to go through a series of unpleasant sternutations.

Prof. Smith, the new professor of surgery at the University, about whose appointment so much dissatisfaction was expressed, is now fast gaining the entire confidence of the students, and increases his popularity daily. He is a fine-looking man, a systematic and thorough lecturer, a good operator, and inspires an enthusiasm for surgery among the students. He has lately opened a *public* room, which is to surgery what a dissecting apartment is to anatomy. Here are furnished to classes, subjects dead and alive, upon whom all the details of minor surgery are practised, such as bandaging by rollers, Mayor's system of handkerchief bandaging, and the various operations which can be performed on the cadaver. Smith is generally present himself. This, however, is an old business for him, and he points with pride to the year 1841, when he had in one private bandaging class the now distinguished Dr. Kane, Prof. Joseph Leidy, Prof. John Neill and Prof. F. G. Smith.

Prof. Gross, of the Jefferson, does not seem to fill up fully the gap left by the eminent Mütter. It is no wonder. The season is so healthy that the students get poor pickings. The wards of the various hospitals are said to be remarkably empty, particularly Blockley. Hence there is some scarcity of anatomical material.

At the Pennsylvania Hospital, Dr. Gerhard gives a medical clinic twice a week. He is a peculiar man, of medium size, spare build and oval head. While lecturing he corrugates his brows into transverse and vertical wrinkles; this takes effect on the circulation in his nose, and makes this organ appear somewhat ruddy. Then his left hand is generally in his breeches pocket, while the right is performing various circles by way of gestures. Withal he is very sensitive to interruptions, and if a student looks at his watch, yawns or goes out of the room, the doctor will break off short, it may be in the midst of a sentence, wait in silence until the annoyance has ceased, and then resume the sentence. I don't mention this in disrespect, for I honor the man who has done so much to elevate his profession. His diagnosis is generally made out beautifully, and his prognosis and treatment given clearly, with the reasons.

A new apparatus for fractured clavicle, by Dr. Levis, of this city, is for its elegance, comfort, simplicity and efficacy receiving considerable favor. It is much less complicated than Bartlett's modification of Fox.

Dr. Smith, a young German attending lectures at the University, has just completed an achievement in modelling which has elicited the astonishment and praises of all anatomists, experienced and inexperienced, who have seen it. It consists of a "model in leather, representing the distribution of the great sympathetic and pneumogastric nerves." It is a section of the head and trunk of a colossal figure, which, entire, would certainly be twelve if not sixteen feet high. The section is made to the right of the mesial line. All the parts are colored to represent life. The par vagum is seen emerging from the posterior foramen lacerum, and its distribution down to its minute ramifications clearly exhibited. The various plexuses on and among the abdominal viscera are so intelligibly demonstrated that one cannot fail to admire the industry and skill of the modeller. This specimen stands in the Museum of the University, and is the property of Prof. Leidy. Dr. Smith is the same individual who prepared the large model in leather of the brain, which attracted so much attention at the late meeting of the American Medical Association.—The volume of transactions of this body for 1856, is nearly ready, if it has not already appeared.

Philadelphia, Nov. 20, 1856.

Yours truly,

R. S.

Dr. Brown-Séguard.—We take pleasure in calling attention to Dr. Séguard's article on the Artificial Production of an Epileptiform Affection in Animals, &c., which appears in the present number, and which is the first of a series of papers which this eminent physiologist has promised to write for our pages. The articles, which will appear regularly from time to time, will form a most interesting series, embracing the latest discoveries of the author, with their application to pathology and the treatment of disease.

Dr. Séguard's course of lectures, which was concluded on Tuesday evening, was attended by a large number of physicians and medical students. The lectures included several of the subjects to which Dr. Séguard has devoted special attention, among which were the Functions of the Spinal Marrow, Epilepsy, Diseases of the Supra-renal Capsules, the Glucogenic Function of the Liver, Diabetes, &c. The strongest interest was manifested by the numerous listeners to this original and valuable course.

Health of Boston.—The mortality from scarlatina, which has been high for several months past, during the last week attained the very large number of 25, which we believe is wholly unprecedented. The number of deaths from the same cause for the corresponding week of last year was only 2; from pneumonia, 4; and the total, 73. We notice that no deaths from measles occurred last week, while there were 5 during the same week last year.

MARRIED.—Dr. Addison Davis, of Lynn, to Miss Emily L. Alden, of Boston.

DIED.—In Bangor, Me., Nov. 17th, Dr. Joshua Prentiss Dickinson, son of the late Rev. Timothy Dickinson, of Holliston, Ms., and a medical graduate of Harvard, aged 64.

Deaths in Boston for the week ending Saturday noon, Nov. 22d, 91. Males, 43—females, 48: Asthma, 1—accident, 2—burns, 2—inflammation of the brain, 1—congestion of the brain, 2—cancer (in the breast), 1—consumption, 13—convulsions, 4—cholera infantum, 1—croup, 3—dropsy, 2—drowned, 1—debility, 3—infantile diseases, 3—erysipelas, 1—typhoid fever, 2—scarlet fever, 25—bilious fever, 1—disease of the heart, 3—inflammation of the lungs, 6—congestion of the lungs, 1—palsy, 1—pleurisy, 1—scalded, 1—teething, 5—unknown, 2—whooping cough, 3.

Under 5 years, 61—between 5 and 20 years, 9—between 20 and 40 years, 13—between 40 and 60 years, 10—above 60 years, 8. Born in the United States, 70—Ireland, 21.

Uses of Glycerine.—This article is likely to take its place among the most highly valued, both in medicine and the arts, and the sooner, since a process has been discovered by which it can be rendered pure by distillation. Its remarkable power as a solvent, united to its entire blandness, and freedom from all irritating and fermenting properties, recommend it for a vast variety of uses. It dissolves the vegetable acids, the deliquescent salts, the sulphates of potassa, soda and copper, the nitrates of potassa and silver, the alkaline salts of morphine, strychnine, brucine, veratrine, the sulphurets of potassium, lime and iodine, the iodides of sulphur, potassium and mercury, the salts of quinia, &c. Besides its extensive usefulness in diseases of the skin and ear, it is used internally as a substitute for cod-liver oil; and also, in its purity, for dissolving calculi, by being injected into the bladder. It is a substitute for syrups in preserving fruits and vegetables, and for certain medicinal preparations. Fresh meats are kept in it for any length of time; and both animals and vegetables are preserved in it without changing their color, however brilliant. Vast quantities can be manufactured from every variety of oils, and at very low prices, compared to what it is sold at now; and it seems to promise well for combustion, both for heat and light, in certain combinations.—*Memphis Medical Recorder.*

Glycerine and Tannin in Vaginitis.—In the treatment of this affection M. Demarquay has found a composition, consisting of eighty parts of glycerine and twenty of tannin, of great service. When the vaginitis first appears, the inflammatory symptoms should be calmed by appropriate regimen, baths, and frequent emollient injections. When the first stage of the inflammation has passed away, and the careful introduction of the speculum has become possible, abundant injections of water are to be thrown in, so as to remove all the muco-pus which lines the walls of the vagina, and these are then dried by a plug of charpie placed at the end of a long forceps. Then, three plugs of wadding, well soaked in glycerine and tannin, are to be introduced. Next day, after a bath, the plugs are removed, new injections made, and the dressing repeated. M. Demarquay has never had to have recourse to more than four or five such dressings. After discontinuing them, astringent injections, consisting of infusion of walnut leaves, in which one drachm of alum to the quart has been dissolved, are employed two or three times a day for a week or ten days.—*Bulletin de Therapeutique.*

Paracentesis Pericardii.—M. Trousseau, physician to the Hotel Dieu, of Paris, performed this operation on the 1st of August last, on a young man of twenty-seven, suffering from pericarditis with effusion. This measure was sanctioned by M. Trousseau's colleagues, as it was evident that the young man must die if relief were not obtained. About three ounces of fluid (which immediately coagulated) flowed from a puncture into the distended pericardium, and about double the quantity from the pleura; the latter liquid coagulating imperfectly. In the evening, severe convulsions of the right side of the body took place; and almost complete hemiplegia of that side was noticed the next day, the intellect remaining unimpaired. The patient died on the fifth day after the operation. About two pints of fluid escaped on the *post-mortem* examination from the pericardium, exactly like the serum first obtained by the puncture; the heart and pericardium were lined with a darkish-yellow, reticulated false membrane; no particular disease of the valves.—*London Lancet.*

New Students at the London Hospitals.—The entries at most of the London hospitals have been unusually large this session, which is the more remarkable as it was feared, now that the war is over, that comparatively few would have commenced their studies. Everything promises a most vigorous session, and the utmost energy is being displayed by all the lecturers on resuming their winter's labors. Amongst the new faces we have noticed some very young pupils indeed.—*Ibid.*

A great Military Hospital in London.—It is rumored that Government is contemplating the establishment of a great military hospital in London, and to break up the one at Chatham. Much inconvenience is felt in the present management of invalids, most of whom, on their arrival at our different sea-port towns from foreign stations, have to come up to London, and are then sent down to Chatham. This will be obviated by a military hospital in this great metropolis.—*lb.*